3.4 TENNESSEE RIVER BASIN
WATAUGA RIVER - ROAN &
(ROARING) FORGE CREEKS

DESCRIPTION and EXTENT OF PROBLEM

According to the 1998 303(d) List, 6.7 miles of the Watauga River – Roan and Roaring Forge Creek watersheds are partially supporting due to sediment loadings from agricultural activities.

1998 303(d) LIST

WATERSHED NAME	**SOURCES**
Roan Creek	siltation/agriculture
(Roaring) Forge Creek	siltation/agriculture

SUBWATERSHED ROTATIONAL PLAN

The Roan Creek watershed will receive 319 funding through a FY-00 UWA grant. The subwatershed, along with Roaring Forge Creek, was selected because of their agricultural predominance. As the FY-00 grant progresses the project manager, Johnson County SCD, should be able to determine, with assistance from TDEC, if construction in the watershed should be addressed next with UWA funding. As is common in most of the UWA watersheds, agricultural BMP activity is more advanced than other nonpoint source issues.

The next watershed to be addressed with UWA funds would more than likely be, Beaverdam Creek in Shady Valley, if it is determined a significant natural resource is being impacted and needs protection.

Several other Watauga subwatersheds will be candidates for future UWA funding. These subwatersheds have pollutants such as pathogens, siltation, and habitat alteration and pollutant sources, which include pasturelands, agriculture, land development, urban runoff, and stormwater according to the 1998 303(d) List. They are: Boones Creek; Cash Hollow Creek; Brush Creek; Sinking Creek; and Doe River.

COOPERATING PARTNERS

Partners	**Abbreviations**
Appalachian RC&D Council	RC&D
City of Mountain City	
Johnson County Soil Conservation District	SCD
Johnson County government	
Local landowners	
Tennessee Department of Agriculture	
Ag Resources Conservation Program	TDA -ARC
Tennessee Department of Environment & Conservation	
Division of Water Pollution Control	TDEC-WPC
Division of Water Supply	
Ground Water Management Program	TDEC-DWS-GWMP
Tennessee Home Builders Association	THBA

Tennessee Valley Authority	TVA
Resource Stewardship Watershed Team Program	
Tennessee Wildlife Resource Agency	TWRA
U.S. Department of Agriculture	
Natural Resources Conservation Service	USDA-NRCS
U.T. Institute of Agriculture	UTIA
U.T.-County Technical Assistance Service	UT-CTAS

Appalachian RC&D Council

The local RC&D Council will provide project management as well as BMP implementation and public awareness. The RC&Ds ability in these areas will be crucial to the generation of projects now and in the future.

City of Mountain City

City officials will be encouraged to work with local landowners and contractors to at least investigate the possibilities of installing BMPs to reduce construction and urban-related runoff. Even though initial BMPs implemented in the watershed will be of an agricultural nature, the city officials, landowners, and contractors will be provided an opportunity to learn how these BMPs can be converted to more urbanized usage. By doing so, if the watershed has been placed on the 303(d) List for stormwater problems, the city will be better informed as to the necessity of such actions and will be more likely to participate in subsequent water quality abatement and remediation efforts directed towards stormwater.

Johnson County government

As Johnson County residential and commercial growth continues to take the remaining farmlands of the Watauga River - Roan Creek watershed, its officials and residents will need to remain aware of and protect the existing Ag-related remediation work already in place. More importantly, government officials need to assume a leadership role in the nonpoint source effort by establishing water quality control measures for all construction sites and stormwater problem areas as growth continues.

Johnson County Soil Conservation District (SCD)

The SCD is a partner in the effort to reduce nonpoint source pollution to the local waters. The SCD can provide a significant amount of financial assistance to local water quality efforts. Through its direct interaction with the local NRCS district conservationist, the SCD can also direct technical as well as administrative assistance to local water quality projects. The SCD also serves as a leader in the effort to increase water quality education of the local citizens and operators.

Local landowners

Landowners will be requested to participate in the implementation of BMPs by allowing the BMP to be placed on their property, contributing to the construction of the BMP through in-kind services, and maintaining the BMP for a pre-determined or indefinite period of time. These same landowners will also be required to allow others to visit the BMP once it has been fully constructed.

CURRENT 319 PROJECTS

The following is a listing of what 319 projects have addressed water quality issues in Watauga River-Roan and Roaring Forge Creek watersheds.

Grant Yr.	Project Title	Partner
FY-2000(UWA)	Watauga R. Water Quality Restoration Project: Roan Cr.	JCSCD

CURRENT MONITORING & ASSESSMENT

TDEC-WPC five-year watershed management approach
TDH-DLS pre- and post- BMP monitoring

MEASURES OF SUCCESS

- UWA projects have been implemented in all 303(d) listed subwatersheds.
- Base projects have been implemented in all 303(d) listed subwatersheds, which require the introduction of un-addressed nps categories (i.e. streambank stabilization) through demonstration projects.
- Post BMP implementation monitoring results are indicating an overall improvement of the water quality of the streams directly affected by BMP implementation.
- The subwatersheds once 303(d) listed have been removed due to sufficient water quality improvements.

MILESTONES

Long Term Goal 1.

Hold regularly scheduled meetings with stakeholders, to create new partnerships, strengthen existing partnerships and to foster greater trust, commitment and accountability.

- **Action**: Conduct an annual priority watershed partners meeting for project coordination.
  Lead: TDA-NPS Program
  Key Partners: TDEC-WPC; USDA-NRCS; TDH-DLS; local governments
  Year(s): 2001-2005

- **Action**: Develop a Watershed Restoration Action Strategy.
  Lead: TDA-NPS Program
  Key Partners: TDEC-WPC; USDA-NRCS; TDEC-DWS-GWMS
  Year(s): 2001

Long Term Goal 3.

Restore all waters impaired by nonpoint sources that are listed on the 1998 303(d) List to the condition of fully supporting their designated uses by 2015, in cooperation with local, state and federal partners.

- **Action**: Twenty percent of the needed BMPs will have been installed in the Watauga River watershed.
  Lead: USDA-NRCS; SCD and RC&D
  Key Partners: TDA-NPS Program
  Year(s): 2005

- **Action**: One hundred percent of the needed agricultural BMPs will have been implemented in the Watauga River – Roan and Forge Creek subwatersheds.
  Lead: USDA-NRCS; RC&D; SCD
  Key Partners: TDA-NPS Program
  Year(s): 2005

Long Term Goal 5.

Improve the knowledge of stakeholders and citizens concerning the origins, magnitude, and prevention of nonpoint source pollution.

- **Action**: Develop at least two educational projects to educate the local citizens, landowners, and elected officials in the Watauga River – Roan & (Roaring) Forge Creeks subwatersheds.
  Lead: TDA-NPS Program
  Key Partner: TDEC-WPC; USDA-NRCS; SCD; TVA
  Year(s): 2005

Long Term Goal 7.

Use the maximum allowable percentage of funding annually to assist partners with water quality monitoring and assessment, for the duration of the 319 program.

- **Action**: One hundred percent of the pre-BMP implementation monitoring will have been completed in the Watauga River – Roan and Forge Creek subwatersheds.
  Lead: TDEC-WPC and TDH-DLS
  Key Partners: TDA-NPS Program
  Year(s): 2005

- **Action**: The water quality of the Watauga River – Roan and Forge Creek subwatersheds will be improved.
  Lead: TDEC-WPC
  Key Partners: TDH-LDS and TDA-NPS Program
  Year(s): 2005